

AMENDMENT AND RESPONSE UNDER 37 § 1.111

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Serial No.: 09/685,475

Filing Date: October 10, 2000

Attorney Docket No. 100.157US01

Title: HIGH FREQUENCY AMPLIFICATION CIRCUIT

REMARKS

Applicant has reviewed the Office Action mailed on May 22, 2003 as well as the art cited. Claims 1-32 are pending in this application.

Rejections Under 35 U.S.C. § 102

Claims 1-23 and 29-31 were rejected under 35 USC § 102(b) as being anticipated by Persson (U.S. Patent No. 5,821,811). A 102 rejection requires that a single reference teach every element of the claim in question.

Claim 1

In regards to independent Claim 1, Claim 1 includes the element "a second path ... including a filter that stops upstream signals in the first frequency band and passes upstream signals in at least a second frequency band and downstream signals in at least third and further frequency bands." The Persson reference does not teach "a second path ... including a filter that stops upstream signals in the first frequency band and passes upstream signals in at least a second frequency band and downstream signals in at least third and further frequency bands," as is disclosed and claimed in Claim 1 of the present application. The Examiner's assertion that the above element is taught in Figure 2 and Column 3, lines 7-21 of the Persson reference is incorrect. Figure 2 of the Persson reference is a portion of the amplifier unit. Please see Column 2, lines 8-10 and lines 32-36. As illustrated in Figure 1 of the Persson reference, the amplifier would be considered to be in the first path. Hence, a second path including a filter is not taught by the Persson reference. Moreover, Column 3, lines 1-21 of the Persson reference relates to a switching function in an amplifier unit. Generally, the Persson reference relates to bypassing an amplifier if the amplifier becomes inoperable. Please see column 1, lines 4-11 of the Persson reference.

Since the Persson reference does not teach each element of Claim 1 of the present application, Applicant respectfully requests the withdrawal of the rejection of Claim 1 under 35 USC § 102(b). Moreover, since Claims 2-6 depend from and further define patentably distinct Claim 1, Applicant also respectfully requests the withdrawal of the rejections of these dependant

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claims. Further, since the Applicant believes the dependant claims are allowable for the reasons set out above, further arguments may have not been put forth in this response addressing all rejections to those dependant claims. Applicant does, however, retain the right to address said rejections if a further response is needed.

Claim 7

In regards to independent Claim 7, Claim 7 includes the element, "a second path, coupled in parallel with the first path, the second path including a filter that stops upstream signals in the first frequency band and passes upstream signals in at least the second frequency band along with downstream signals." The Persson reference does not teach "a second path, coupled in parallel with the first path, the second path including a filter that stops upstream signals in the first frequency band and passes upstream signals in at least the second frequency band along with downstream signals," as is disclosed and claimed in Claim 7 of the present application. Please refer to argument put forth in regards to independent Claim 1.

Since the Persson reference does not teach each element of Claim 7 of the present application, Applicant respectfully requests the withdrawal of the rejection of Claim 7 under 35 USC § 102(b). Moreover, since Claims 8-14 depend from and further define patentably distinct Claim 7, Applicant also respectfully requests the withdrawal of the rejections of these dependant claims. Further, since the Applicant believes the dependant claims are allowable for the reasons set out above, further arguments may have not been put forth at this time addressing any additional rejections to those dependant claims. Applicant does, however, retain the right to address said rejections if a further response is needed.

Claim 15

In regards to independent Claim 15, Claim 15 includes the elements, "amplifying the first frequency band of the received signal; and passing at least one additional frequency band of the received signal without amplification." The Persson reference does not teach "amplifying the first frequency band of the received signal; and passing at least one additional frequency band of the received signal without amplification," as is disclosed and claimed in Claim 15 of the present

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application. In general, the present invention allows a base station to "support both first and second services over a substantially co-extensive geographical region." Please see page 2, lines 11 -17 the present invention. Generally, the Persson reference relates to bypassing an amplifier if the amplifier becomes inoperable. Please see column 1, lines 4-11 of the Persson reference.

Since the Persson reference does not teach each element of Claim 15 of the present application, Applicant respectfully requests the withdrawal of the rejection of Claim 15 under 35 USC § 102(b). Moreover, since Claims 16-20 depend from and further define patentably distinct Claim 15, Applicant also respectfully requests the withdrawal of the rejections of these dependant claims. Further, since the Applicant believes the dependant claims are allowable for the reasons set out above, further arguments may have not been put forth in this response addressing all rejections to those dependant claims. Applicant does, however, retain the right to address said rejections if a further response is needed.

Claim 21

In regards to independent Claim 21, Claim 21 includes the element, "a second path, coupled between the first and second ports, the second path including a band stop filter that stops signals in the first frequency band and passes at least upstream signals in the second frequency band and passes downstream signals received at the second port." The Persson reference does not teach "a second path, coupled between the first and second ports, the second path including a band stop filter that stops signals in the first frequency band and passes at least upstream signals in the second frequency band and passes downstream signals received at the second port," as is disclosed and claimed in Claim 21 of the present application. Moreover, the Persson reference does not teach a "band stop filter" as is disclosed and claimed in Claim 21 of the present application. In addition, please refer to the additional arguments put forth in regards to independent Claim 1, 7 and 15.

Since the Persson reference does not teach each element of Claim 21 of the present application, Applicant respectfully requests the withdrawal of the rejection of Claim 21 under 35 USC § 102(b). Moreover, since Claims 22-23 depend from and further define patentably distinct Claim 21, Applicant also respectfully requests the withdrawal of the rejections of these

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dependant claims. Further, since the Applicant believes the dependant claims are allowable for the reasons set out above, further arguments may have not been put forth in this response addressing all rejections to those dependant claims. Applicant does, however, retain the right to address said rejections if a further response is needed.

Claim 29

In regards to independent Claim 29, Claim 29 includes the element, "a plurality of amplification circuits coupled to the antenna and coupled in series, each amplification circuit adapted to selectively amplify upstream signals in a selected frequency band for a selected service and to pass downstream signals and other upstream signals." The Persson reference does not teach "a plurality of amplification circuits coupled to the antenna and coupled in series, each amplification circuit adapted to selectively amplify upstream signals in a selected frequency band for a selected service and to pass downstream signals and other upstream signals," as is disclosed and claimed in Claim 29 of the present application. As referenced above, the present invention provides a base station that supports multiple services. Please see page 7, lines 17 -21 the present invention. This is not what is taught in the Persson reference.

Since the Persson reference does not teach each element of Claim 29 of the present application, Applicant respectfully requests the withdrawal of the rejection of Claim 29 under 35 USC § 102(b). Moreover, since Claims 30-31 depend from and further define patentably distinct Claim 29, Applicant also respectfully requests the withdrawal of the rejections of these dependant claims. Further, since the Applicant believes the dependant claims are allowable for the reasons set out above, further arguments may not have been put forth in this response addressing all rejections to those dependant claims. Applicant does, however, retain the right to address said rejections if a further response is needed.

Claims 24 and 26 were rejected under 35 USC § 102(b) as being anticipated by Garner et al. (U.S. Patent No. 5,890,056). A 102 rejection requires that a single reference teach every element of the claim in question.

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Claim 24

In regards to independent Claim 24, Claim 24 includes the elements "a plurality of base stations ... that are adapted to communicate with wireless terminals using one of at least two services; and wherein each base station supports the at least two services within the geographic area of the base station." The Gerner et al. reference does not teach a plurality of base stations ... that are adapted to communicate with wireless terminals using one of at least two services; and wherein each base station supports the at least two services within the geographic area of the base station," as is described and Claimed in Claim 24 of the present application. In particular, the Gerner et al. reference relates to a personal base station that uses duplexer technology to receive and monitor signals in both the uplink and downlink channel spectra in order to determine channel availability. Please see Column 3, lines 7-22 of the Gerner et al. reference. However, as stated above, the Gerner et al. reference does not teach "a plurality of base stations ... adapted to communicate ... using one of at least two services." That is, the present invention provides a base station that supports multiple services. Please see page 7, lines 17 -21 of the present invention.

Since the Gerner et al. reference does not teach each element of Claim 24 of the present application, Applicant respectfully requests the withdrawal of the rejection of Claim 24 under 35 USC § 102(b). Moreover, since Claims 25-27 depend from and further define patentably distinct Claim 24, Applicant also respectfully requests the withdrawal of the rejections of these dependant claims. Further, since the Applicant believes the dependant claims are allowable for the reasons set out above, further arguments may not have been put forth in this response addressing all rejections to those dependant claims. Applicant does, however, retain the right to address said rejections if a further response is needed.

Rejections Under 35 U.S.C. § 103

Claims 25 and 27 were rejected under 35 USC § 103(a) as being unpatentable over Garner et al. ('056) and further in view of Persson ('811). To establish a *prima facie* case of obviousness under 103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of

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ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143

Claim 25

In regards to dependant Claim 25, Claim 25 claims "wherein each base station includes an amplification circuit that amplifies signals received from wireless terminals for one of the services and that passes without amplification signals from other wireless terminals for the other service and passes downstream signals to the wireless terminals." Neither Gartner et al. nor the Persson reference teach or suggest "wherein each base station includes an amplification circuit that amplifies signals received from wireless terminals for one of the services and that passes without amplification signals from other wireless terminals for the other service and passes downstream signals to the wireless terminals," as is disclosed and claimed in Claim 25 of the present application. In particular, neither the Garner et al. reference nor the Persson reference teach a base adapted for multiple services as is disclosed and claimed in the present application. Further, neither the Garner et al. nor the Persson reference teach or suggest multiple services wherein signals from one of the services is amplified while signals from other services are not amplified. Since neither the Persson reference nor the Garner et al do not teach or suggests the above elements of Claim 25, a prima facie case of obviousness has not been shown. Accordingly, the Applicant respectfully request the withdrawal of the rejection of Claim 25 under 35 USC § 103(a).

Claim 28 was rejected under 35 USC § 103(a) as being unpatentable over Persson ('811). To establish a *prima facie* case of obviousness under 103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143

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In regards to dependant Claim 28, Claim 28 claims "amplifying the first frequency band of the received signal; passing at least one additional frequency band of the received signal without amplification, the at least one additional frequency band being lower in frequency than the first frequency band" the Persson reference does not teach or suggest "amplifying the first frequency band of the received signal; passing at least one additional frequency band of the received signal without amplification, the at least one additional frequency band being lower in frequency than the first frequency band," as is disclosed and claimed in Claim 28 of the present application. The Persson reference relates to a bypass segment which is activated if an amplifier becomes inoperable. Please see column 1, lines 4-11 of the Persson reference. Therefore, a *prima facie* case of obviousness has not been show. Accordingly, the Applicant respectfully request the withdrawal of the rejection of Claim 28 under 35 USC § 103(a).

Claim 32 was rejected under 35 USC § 103(a) as being unpatentable over Persson ('811) and further in view of Rose (US Patent 6,195,561). To establish a *prima facie* case of obviousness under 103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143

In regards to dependant Claim 32, Claim 32 claims "wherein a last of the plurality of amplification circuits includes a DC grounded antenna port." Neither the Persson nor the Rose reference teach or suggest "wherein a last of the plurality of amplification circuits includes a DC grounded antenna port," as is disclosed and claimed in Claim 32 and it's independent claim. In particular, no suggestion or motivation is provided, in either of the sited references, to combine the references to come up with what is claimed in Dependant Claim 32 and its independent claim. Therefore, a *prima facie* case of obviousness has not been show. Accordingly, the Applicant respectfully request the withdrawal of the rejection of Claim 32 under 35 USC § 103(a).

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CONCLUSION

Applicant respectfully submits that claims 1-32 are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 332-4720.

Respectfully submitted,

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